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EXAMINER	
PAPE, ZACHARY	

ART UNIT	PAPER NUMBER
2835	

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/816,245	STROBEL, LARRY A.	
	Examiner	Art Unit	
	Zachary M. Pape	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/1/2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-7,12-27* is/are rejected.

7)☒ Claim(s) *2,8-11 and 24* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 April 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the video monitor, control circuit, disk drive, back-up ventilation system, and video port as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. Claims 23, 11 objected to because of the following informalities: The video monitor and video port, and control circuit, respectively are not discussed anywhere in the specification. Appropriate correction is required.

Claim Objections

3. Claim 24 recites the limitation "the first region" in line 5. There is insufficient antecedent basis for this limitation in the claim. It appears that the phrase should read "a first region". Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 3-4, 6-7, 12-13, 15-22, 24-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Nicolai et al. (Patent # 6,463,997) in view of Gianelo (Patent # 6,589,308). With respect to claim 1, Nicolai et al. teaches the use of a computer system comprising: a cabinet (comprising elements 12, 10, 13, etc.) having a closure configured to be substantially airtight when closed, and a cooling unit (30) positioned within the cabinet, the cooling unit configured to draw air from a first region of the cabinet (area near 38), cool the air (via evaporator 42) and output the air (via fan 41) into a second

region of the cabinet (area near 39). Nicolai et al. fails to teach a personal computer positioned within the cabinet.

6. Gianelo teaches the use of a personal computer (24) positioned within a computer cabinet (10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the computer of Gianelo with the cabinet and cooling unit of Nicolai et al. to provide an environment that supplies superior cooling to the computer to reduce malfunctions and breakdowns of computer components.

7. With respect to claim 3, Gianelo further illustrates a disk drive positioned within the computer (Fig 1 outlined on the front of computer (24)). Further Nicolai et al. teaches that the cabinet includes an access panel (cabinet door, Column 2, Lines 48-50)) for access to components housed therein such as the disk drive.

8. With respect to claim 4, Gianelo further teaches the use of a video monitor (22). Gianelo fails to explicitly teach that the monitor is coupled to the computer via a cable however in order for the computer (24) to communicate with the monitor (22) it must inherently be connected to the computer. With respect to an opening in the cabinet for receiving the cable, Nicolai et al. teaches that the cabinet can be used to house switchgears which require that wires or cables have access to the interior of the box from the exterior therefore it would have been obvious to use the accessibility of Nicolai et al. to facilitate communication between the computer (housed within the cabinet) and the monitor.

9. Claims 5 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Nicolai et al. in view of Gianelo and further in view of Layton (Patent # 6,483,709). With

respect to claim 5, Nicolai et al. in view of Gianelo teaches the claimed subjected matter as taught above in claim 1 but fails to teach the use of jump cables coupled at a first end to a port of the computer, and coupled to a second end to a port in a wall of the cabinet.

10. Layton teaches the use of a jump cable (290b, Fig 5) coupled at a first end (on frame 110a) to a port (225) and coupled at a second end to a port (375) on another member (300). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the jump cables of Layton with the cabinet and air conditioner of Gianelo and Nicolai et al. to provide a means of attaching cables from the peripheral devices (including electricity, mouse, keyboard, etc.) to the computer without having to open the cabinet.

11. With respect to claim 14, Nicolai et al. in view of Gianelo teaches the claimed subjected matter as taught above in claim 6 but fails to teach the arrangement of jump cables and ports.

12. Layton teaches the use of a cable jump port arrangement (as shown in Fig 5) to connect an outer wall (400) to an inner wall (110a). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the jump cables of Layton with the cabinet and air conditioner of Gianelo and Nicolai et al. to provide a means of attaching cables from the peripheral devices (including electricity, mouse, keyboard, etc.) to the computer without having to open the cabinet.

13. With respect to claim 6, Nicolai et al. teaches the use of an air conditioning unit (30) configured to draw air into the unit (via fan 42 and opening 38), cool the air to within

a selected range of temperatures (via evaporator 42), and blow the air into the enclosure (via opening 39). Nicolai et al. fails to teach an enclosure configured to substantially enclose the computer.

14. Gianelo teaches the use of an environmental control unit for a personal computer (24) comprising: an enclosure (16) configured to substantially enclose the computer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cabinet and computer of Gianelo with the air conditioning unit of Nicolai et al. to supply the computer with superior cooling to reduce malfunctions and breakdowns of computer components.

15. With respect to claim 7, Nicolai et al. teaches that the air conditioning unit (30) is configured to draw air from a first region (area near inlet 38) of the enclosure and blow the air into a second region of the enclosure (near outlet 39).

16. With respect to claim 12, Gianelo further teaches a port (14) for access to a front side of the personal computer case.

17. With respect to claim 13, Gianelo further illustrates an aperture in a wall of the enclosure for passage of cables (Fig 3, Cable exiting through panel 20).

18. With respect to claim 15, Gianelo further teaches the use of a filter (30) configured to remove contaminants from air drawn into the air conditioning unit.

19. With respect to claim 16, Nicolai et al. fails to disclose a thermostat controlling the operation of the climate control device 30, however it is notoriously obvious and well known in the art to accompany an air conditioning unit with a control device such as a

thermostat to provide automatic temperature control within the enclosure being air conditioned.

20. With respect to claim 17, Nicolai et al. in view of Gianelo teaches the limitations as expressed in claim 6 above, but fails to teach that the enclosure is configured to substantially enclose a plurality of personal computers. It would have been an obvious matter of design choice to extend the walls and door of the enclosure (of Gianelo) since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

21. With respect to claim 18, Gianelo further illustrates that the personal computer (24) is separately encased in a tower case (Fig 1 as shown by the dashed lines within the cabinet).

22. Claim 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Nicolai et al. in view of Gianelo and further in view of Andersson et al. (Patent # 5,398,159). With respect to claim 19, the combination of Gianelo in view of Nicolai et al. meets the claim limitations expressed in claim 6 above, but fails to teach the use of a back-up ventilation system configured to operate in response to a failure of the air conditioning unit.

23. Andersson et al. teaches the use of a back-up ventilation system configured to operate in response to a failure of the air conditioning unit. (Column 8, Lines 36-40) It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the backup ventilation system of Andersson et al. with the air conditioning unit and cabinet of Nicolai et al. and Gianelo respectively to permit

continued operation of the computer equipment in the event that the air conditioning unit fails (Andersson; Column 8, Lines 38-40).

24. With respect to claim 20, Nicolai et al. teaches the use of a refrigeration unit (30) configured to draw air from a first region of the chassis (area near 38), cool the air (via evaporator 42) to within a selected temperature range, and output the cooled air into a second region of the chassis (area near 39). Nicolai et al. fails to teach the use of a chassis configured to receive computer components, and a cover configured to enclose the chassis and components.

25. Gianelo teaches a computer, comprising a chassis (as outlined in Fig 1 within the cabinet) configured to receive computer components, a cover (10) configured to enclose the chassis and components. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cabinet and computer of Gianelo with the air conditioning unit of Nicolai et al. to supply the computer with superior cooling to reduce malfunctions and breakdowns of computer components.

26. With respect to claim 21, Gianelo teaches the use of a computer system (24) within the cabinet (10), but fails to explicitly teach that the computer comprises a motherboard, a hard drive, and a power supply each coupled to the chassis. Such components (hard drive, power supply, and motherboard) are inherently part of a computer system. Further it is well known in the art to install each within a chassis.

27. With respect to claim 22, Gianelo further illustrates that a disk drive is coupled to the chassis (through the outlined lines in Fig 1), the cover (10) being configured to provide access to the disk drive from outside the cover (via door 14).

28. With respect to claim 23, Gianelo teaches the use of a monitor (22) but fails to explicitly teach that a monitor is coupled to the computer via a cable, however in order for the computer (24) to communicate with the monitor (22) it must inherently be connected to the computer through a video port which could be located on the cover. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to couple the video monitor (22) of Gianelo to a port in the cabinet cover to create an electrical connection between the computer and the monitor allowing the user to visually access data within the computer.

29. With respect to claim 24, Nicolai et al. in view of Gianelo further teaches a method of cooling a personal computer, comprising drawing air into a cooling unit (30 via 38) coupled to an enclosure (10), cooling the air (via evaporator 42); blowing the air from the cooling unit to a first region within the enclosure (via fan 41 and 39), drawing the air from a first region (Gianelo; near entrance holes near 20) into the personal computer (24) positioned within the enclosure, transferring heat from components within the personal computer case to the air; and moving the air from the personal computer to a second region within the enclosure (near subsequent exit air holes on the computer).

30. With respect to claim 25, Nicolai et al. in view of Gianelo further teaches that drawing air into the cooling unit step comprises drawing air from the second region into the cooling unit. (The intake duct (38) of Nicolai et al. can be placed near the subsequent exit holes of the computer of Gianelo therefore allowing warmed air from the computer to exit the chassis and enter into the cooling unit of Nicolai et al.)

31. With respect to claim 26 Nicolai et al. in view of Gianelo further teaches exhausting the air outside the enclosure (through hole 40 in Gianelo), and then drawing air into the cooling unit step comprises drawing air from outside the enclosure, into the cooling unit. (outlet ports 28 of Gianelo allows air to enter into the enclosure (10) and thus air will be drawn into the enclosure from outside the enclosure)

32. Claim 27 rejected under 35 U.S.C 103(a) as being unpatentable over Nicolai et al. in view of Gianelo and further in view of Johnson et al. (Patent # 5,813,243). With respect to claim 27, Nicolai et al in view of Gianelo teaches all the limitations expressed in claim 24 above, but Gianelo fails to explicitly teach the use of a fan within the PC.

33. Johnson et al. teaches the use of exhaust fans (114,116) within the PC chassis to draw air in through inlet holes (10) cool the components within the system, and exit through exit holes (122). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the internal ventilation system of Johnson et al. with the combination air conditioning and cabinet of Nicolai et al. and Gianelo respectively to allow for superior cooling of the internal component of the PC to reduce malfunctions and breakdowns.

Allowable Subject Matter

34. Claims 2, 8-11 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

35. The following is a statement of reasons for the indication of allowable subject matter:

36. With respect to claim 2, the claim recites that a gasket positioned in a space between an inner surface of the cabinet and an outer surface of the personal computer, configured to prevent passage of air between the personal computer and the inner surface of the cabinet, from the second region to the first region. These limitations in combination with all remaining limitations of claim 1 are believed to render the subject matter allowable over the art of record.

37. With respect to claims 8 and 9, the claims recite a means for preventing circulation of air within the enclosure and around an exterior of a case of the personal computer from the second region of the enclosure to the first region of the enclosure and further recites that the preventing means comprises: a gasket configured to substantially seal a space between an interior surface of the enclosure and an exterior surface of the personal computer case, on three sides of the case. These limitations in combination with all remaining limitations of claims 6 are believed to render the subject matter allowable over the art of record.

38. With respect to claims 10 and 11, the claims recite that the air conditioning unit is configured to selectively draw air from a first region of the enclosure or draw air from the exterior of the enclosure, while air from the first region of the enclosure is vented to the exterior, and wherein the unit is further configured to blow the air into a second region of the enclosure and further recites that the means for comparing the temperature of air in the first region of the enclosure with the temperature of air outside the enclosure, and a

control circuit coupled to the comparing means to control the region from which the air is selected. These limitations in combination with all remaining limitations of claim 6 are believed to render the subject matter allowable over the art of record.

Conclusion

39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary M. Pape whose telephone number is 571-272-2201. The examiner can normally be reached on Mon. - Thur. & every other Fri. (8:00am - 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached at 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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